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RAW SEQUENCE LISTING DATE: 04/23/2001
PATENT APPLICATION: US/09/828,000 TIME: 13:24:42

Input Set : A:\Vasostatin as Marrow Protectant.ST25.txt
Output Set: N:\CRF3\04232001\I828000.raw

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3 <110> APPLICANT: Government of the United States of America
5 <120> TITLE OF INVENTION: Vasostatin as Marrow Protectant
7 <130> FILE REFERENCE: 4239-55414
C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/828,000
C--> 9 <141> CURRENT FILING DATE: 2001-04-06
9 <160> NUMBER OF SEQ ID NOS: 8
11 <170> SOFTWARE: PatentIn version 3.0
13 <210> SEQ ID NO: 1
14 <211> LENGTH: 1251
15 <212> TYPE: DNA
16 <213> ORGANISM: Calreticulin
18 <400> SEQUENCE: 1
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21 gtctacttca aggagcagtt tctggacgga gacgggtgga cttcccgctg gatcgaatcc 120
23 aaacacaagt cagattttgg caaattcgtt ctcagttccg gcaagttcta cggtgacgag 180
25 gagaaagata aaggtttgca gacaagccag gatgcacgct tttatgctct gtcggccagt 240
27 ttcgagcctt tcagcaacaa aggccagacg ctggtggtgc agttcacggt gaaacatgag 300
29 cagaacatcg actgtggggg cggctatgtg aagctgtttc ctaatagttt ggaccagaca 360
31 gacatgcacg gagactcaga atacaacatc atgtttggtc ccgacatctg tggccctggc 420
33 accaagaagg ttcatgtcat cttcaactac aagggcaaga acgtgctgat caacaaggac 480
35 atccgttgca aggatgatga gtttacacac ctgtacacac tgattgtgcg gccagacaac 540
37 acctatgagg tgaagattga caacagccag gtggagtccg gctccttgga agacgattgg 600
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41 gagcgggcca agatcgatga tcccacagac tccaagcctg aggactggga caagcccgag 720
43 catatccctg accctgatgc taagaagccc gaggactggg atgaagagat ggacggagag 780
45 tgggaacccc cagtgattca gaaccctgag tacaagggtg agtggaagcc ccggcagatc 840
47 gacaacccag attacaaggg cacttggatc cacccagaaa ttgacaaccc cgagtattct 900
49 cccgatccca gtatctatgc ctatgataac tttggcgtgc tgggcctgga cctctggcag 960
51 gtcaagtctg gcaccatctt tgacaacttc ctcatcacca acgatgaggc atacgctgag 1020
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55 caggacgagg agcagaggct taaggaggag gaagaagaca agaaacgcaa agaggaggag 1140
57 gaggcagagg acaaggagga tgatgaggac aaagatgagg atgaggagga tgaggaggac 1200
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63 <211> LENGTH: 416
64 <212> TYPE: PRT
65 <213> ORGANISM: Calreticulin
67 <400> SEQUENCE: 2
69 Met Leu Leu Ser Val Pro Leu Leu Leu Gly Leu Leu Gly Leu Ala Val
70 1 5 10 15
72 Ala Glu Pro Ala Val Tyr Phe Lys Glu Gln Phe Leu Asp Gly Asp Gly
73 20 25 30
75 Trp Thr Ser Arg Trp Ile Glu Ser Lys His Lys Ser Asp Phe Gly Lys
76 35 40 45
78 Phe Val Leu Ser Ser Gly Lys Phe Tyr Gly Asp Glu Glu Lys Asp Lys
79 50 55 60
81 Gly Leu Gln Thr Ser Gln Asp Ala Arg Phe Tyr Ala Leu Ser Ala Ser

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82 65                  70                  75                  80
84 Phe Glu Pro Phe Ser Asn Lys Gly Gln Thr Leu Val Val Gln Phe Thr
85                 85                  90                  95
87 Val Lys His Glu Gln Asn Ile Asp Cys Gly Gly Gly Tyr Val Lys Leu
88             100                 105                 110
90 Phe Pro Asn Ser Leu Asp Gln Thr Asp Met His Gly Asp Ser Glu Tyr
91         115                 120                 125
93 Asn Ile Met Phe Gly Pro Asp Ile Cys Gly Pro Gly Thr Lys Lys Val
94     130                 135                 140
96 His Val Ile Phe Asn Tyr Lys Gly Lys Asn Val Leu Ile Asn Lys Asp
97 145                 150                 155                 160
99 Ile Arg Cys Lys Asp Asp Glu Phe Thr His Leu Tyr Thr Leu Ile Val
100                165                 170                 175
102 Arg Pro Asp Asn Thr Tyr Glu Val Lys Ile Asp Asn Ser Gln Val Glu
103            180                 185                 190
105 Ser Gly Ser Leu Glu Asp Asp Trp Asp Phe Leu Pro Pro Lys Lys Ile
106        195                 200                 205
108 Lys Asp Pro Asp Ala Ser Lys Pro Glu Asp Trp Asp Glu Arg Ala Lys
109     210                 215                 220
111 Ile Asp Asp Pro Thr Asp Ser Lys Pro Glu Asp Trp Asp Lys Pro Glu
112 225                 230                 235                 240
114 His Ile Pro Asp Pro Asp Ala Lys Lys Pro Glu Asp Trp Asp Glu Glu
115                245                 250                 255
117 Met Asp Gly Glu Trp Glu Pro Pro Val Ile Gln Asn Pro Glu Tyr Lys
118            260                 265                 270
120 Gly Glu Trp Lys Pro Arg Gln Ile Asp Asn Pro Asp Tyr Lys Gly Thr
121        275                 280                 285
123 Trp Ile His Pro Glu Ile Asp Asn Pro Glu Tyr Ser Pro Asp Pro Ser
124     290                 295                 300
126 Ile Tyr Ala Tyr Asp Asn Phe Gly Val Leu Gly Leu Asp Leu Trp Gln
127 305                 310                 315                 320
129 Val Lys Ser Gly Thr Ile Phe Asp Asn Phe Leu Ile Thr Asn Asp Glu
130                325                 330                 335
132 Ala Tyr Ala Glu Glu Phe Gly Asn Glu Thr Trp Gly Val Thr Lys Ala
133            340                 345                 350
135 Ala Glu Lys Gln Met Lys Asp Lys Gln Asp Glu Glu Gln Arg Leu Lys
136        355                 360                 365
138 Glu Glu Glu Glu Asp Lys Lys Arg Lys Glu Glu Glu Glu Ala Glu Asp
139     370                 375                 380
141 Lys Glu Asp Asp Glu Asp Lys Asp Glu Asp Glu Glu Asp Glu Glu Asp
142 385                 390                 395                 400
144 Lys Glu Glu Asp Glu Glu Glu Asp Val Pro Gly Gln Ala Lys Asp Glu
145                405                 410                 415
147 <210> SEQ ID NO: 3
148 <211> LENGTH: 180
149 <212> TYPE: PRT
150 <213> ORGANISM: Vasostatin
152 <400> SEQUENCE: 3
154 Glu Pro Ala Val Tyr Phe Lys Glu Gln Phe Leu Asp Gly Asp Gly Trp
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155 1               5                   10                  15
157 Thr Ser Arg Trp Ile Glu Ser Lys His Lys Ser Asp Phe Gly Lys Phe
158             20                  25                  30
160 Val Leu Ser Ser Gly Lys Phe Tyr Gly Asp Glu Glu Lys Asp Lys Gly
161         35                  40                  45
163 Leu Gln Thr Ser Gln Asp Ala Arg Phe Tyr Ala Leu Ser Ala Ser Phe
164     50                  55                  60
166 Glu Pro Phe Ser Asn Lys Gly Gln Thr Leu Val Val Gln Phe Thr Val
167 65                  70                  75                  80
169 Lys His Glu Gln Asn Ile Asp Cys Gly Gly Gly Tyr Val Lys Leu Phe
170                 85                  90                  95
172 Pro Asn Ser Leu Asp Gln Thr Asp Met His Gly Asp Ser Glu Tyr Asn
173             100                 105                 110
175 Ile Met Phe Gly Pro Asp Ile Cys Gly Pro Gly Thr Lys Lys Val His
176         115                 120                 125
178 Val Ile Phe Asn Tyr Lys Gly Lys Asn Val Leu Ile Asn Lys Asp Ile
179     130                 135                 140
181 Arg Cys Lys Asp Asp Glu Phe Thr His Leu Tyr Thr Leu Ile Val Arg
182 145                 150                 155                 160
184 Pro Asp Asn Thr Tyr Glu Val Lys Ile Asp Asn Ser Gln Val Glu Ser
185                 165                 170                 175
187 Gly Ser Leu Glu
188             180
190 <210> SEQ ID NO: 4
191 <211> LENGTH: 61
192 <212> TYPE: PRT
193 <213> ORGANISM: Fragment 1
195 <400> SEQUENCE: 4
197 Thr Asp Met His Gly Asp Ser Glu Tyr Asn Ile Met Phe Gly Pro Asp
198 1               5                   10                  15
200 Ile Cys Gly Pro Gly Thr Lys Lys Val His Val Ile Phe Asn Tyr Lys
201             20                  25                  30
203 Gly Lys Asn Val Leu Ile Asn Lys Asp Ile Arg Cys Lys Asp Asp Glu
204         35                  40                  45
206 Phe Thr His Leu Tyr Thr Leu Ile Val Arg Pro Asp Asn
207     50                  55                  60
209 <210> SEQ ID NO: 5
210 <211> LENGTH: 27
211 <212> TYPE: PRT
212 <213> ORGANISM: Fragment 2
214 <400> SEQUENCE: 5
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217 1               5                   10                  15
219 Lys Asn Val Leu Ile Asn Lys Asp Ile Arg Cys
220             20                  25
222 <210> SEQ ID NO: 6
223 <211> LENGTH: 18
224 <212> TYPE: PRT
225 <213> ORGANISM: Fragment 3
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237 <212> TYPE: PRT
238 <213> ORGANISM: Fragment 4
240 <400> SEQUENCE: 7
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243 1               5                   10                  15
245 Arg Cys Lys Asp Asp Glu Phe Thr His Leu Tyr Thr Leu Ile Val Arg
246             20                  25                  30
248 Pro Asp Asn
249         35
251 <210> SEQ ID NO: 8
252 <211> LENGTH: 61
253 <212> TYPE: PRT
254 <213> ORGANISM: Fragment 5
256 <400> SEQUENCE: 8
258 Cys Gly Pro Gly Thr Lys Lys Val His Val Ile Phe Asn Tyr Lys Gly
259 1               5                   10                  15
261 Lys Asn Val Leu Ile Asn Lys Asp Ile Arg Cys Lys Asp Asp Glu Phe
262             20                  25                  30
264 Thr His Leu Tyr Thr Leu Ile Val Arg Pro Asp Asn Thr Tyr Glu Val
265         35                  40                  45
267 Lys Ile Asp Asn Ser Gln Val Glu Ser Gly Ser Leu Glu
268     50                  55                  60
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VERIFICATION SUMMARY DATE: 04/23/2001
PATENT APPLICATION: US/09/828,000 TIME: 13:24:44

Input Set : A:\Vasostatin as Marrow Protectant.ST25.txt
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L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date